

**American Rivers * Environmental Defense * Institute for Agriculture and Trade
Policy Izaak Walton League of America * Mississippi River Basin Alliance
National Audubon Society * National Wildlife Federation**

July 11, 2002

U.S. Army Corps of Engineers,
Rock Island
ATTN: CEMVR-PM (Lundberg)
Clock Tower Building
P.O. Box 2004
Rock Island, IL 61204-2004

Dear Mr. Lundberg:

Our organizations are deeply concerned that the Draft Interim Report for the Upper Mississippi River-Illinois Waterway Navigation Study exaggerates expected barge traffic growth, proposes to use faulty economic models to forecast traffic growth, abandons the principles of benefit-cost analysis in favor of qualitative "scenarios," fails to consider small-scale opportunities to immediately relieve lock congestion, and ignores the Corps' existing legal obligations.

Since August 2001, we have been participating in the Corps efforts to develop a new scope of work for the revised Upper Mississippi River-Illinois Waterway Navigation Study, including frequent meetings and conversations with the study team and cooperating agencies. Some important steps have been made to increase our understanding of what is needed (1) to stop the ongoing degradation of the Upper Mississippi River System natural resources, (2) to restore those resources to a desired level, and (3) to actively maintain and restore existing habitats to meet the future needs of society.

As the Upper Mississippi River Conservation Committee recently reported, the science is clear: the Upper Mississippi and Illinois rivers are slowly losing the ability to support many species of river wildlife, and dam and channel construction and operation are leading causes of this ecological decline. The U.S. Fish and Wildlife Service, in a draft Fish and Wildlife Coordination Act report, recently concluded that "current fish and wildlife populations are not self-sustainable under the current navigation management regime" and that "the proposed project to increase navigation traffic will further degrade the resources of the river ecosystem unless appropriate management actions are taken." The Upper Mississippi and Illinois rivers are far more than commercial waterways. These rivers supports hundreds of species, including 10 federally protected species, and attract millions of annual visitors who spend \$1.2 billion, supporting 18,000 jobs. Accordingly, we believe that Corps should use objective, peer-reviewed methods and models to assess navigation and natural resource needs.

The Draft Interim Report Ignores the Findings of the National Research Council

The Draft Interim Report simply ignores the recommendations of the National Research Council (NRC) in its 2001 Inland Navigation System planning report. First, the NRC rejected the Tow Cost Model that the Corps now proposes to use in the Draft Interim Report and instead directed the Corps to use an updated version of the Spatial Equilibrium model, which explicitly recognizes and incorporates the elasticity of demand for barge transportation. Second, the NRC rejected the Corps' grossly optimistic traffic forecasts in the original feasibility study, but the Corps continues to rely on similar forecasts of traffic growth, now called "scenarios," in the Draft Interim Report. Third, the NRC urged the Corps to first investigate small-scale measures such as mooring buoys and traffic scheduling before assessing more costly future transportation needs, but the Corps does not propose to quickly investigate and implement justified small-scale measures.

The Corps' failure to follow the NRC recommendations is particularly troubling in light of the history of the navigation study planning process. We urge the Corps to comply with the NRC recommendations by rejecting the Tow Cost Model, deleting the grossly optimistic traffic projections prepared by the Sparks Companies, and immediately focusing the study on the investigation and implementation of small-scale measures. If the Corps had followed the NRC recommendations in 2001, a revised Spatial Equilibrium model would nearly be complete; instead, the Corps proposes to use models and methods that reflect a major step backward from the draft feasibility study. We also urge the Corps to abandon its "scenario-based" approach and instead employ a credible benefit-cost analysis that (1) explicitly recognizes the uncertainty and risks associated with attempting to forecast the future, and (2) recognizes adverse environmental impacts and reasonably accounts for environmental mitigation and restoration costs. As importantly, we urge the Corps to submit the model the agency proposes to use in the revised feasibility study for review and approval by the NRC panel.

Response: The National Research Council (NRC) recognized that the theoretical spatial equilibrium model represented a major advance over previous economic models. However, the NRC also found that as a result of flawed assumptions and lack of data the spatial equilibrium model ESSENCE should not be used in the feasibility study. The NRC recommendation was to correct the problems with the spatial equilibrium model through data collection and additional analysis. The Corps and the Federal Principals Group endorse the NRC findings on spatial equilibrium concepts. However, the Corps and the Federal Principals Group concluded that a fully developed and tested spatial equilibrium model was unlikely to be achieved in a reasonable time frame for feasibility study completion consistent with stakeholder and Congressional expectations. To fully comply with the NRC recommendations would have involved adding years to the study that has been ongoing since 1993 and also would have involved a significant increase in costs. There is also a high degree of uncertainty as to whether the kind of spatial model envisioned by the NRC is even possible. Therefore, the decision by the Corps and endorsed by the Federal Principals Group was to use an existing economic model. The Corps has committed to continue research and development on improved models, however it is unlikely that this effort will be completed in time for use in the feasibility

study. An adaptive management process is being considered that would review study results as new models are developed, tested and accepted.

The NRC report was critical of the original study's traffic forecast because the forecasts relied on past trends and it failed to account for potential changes in global and domestic supply and demand. The current forecasts are based on five scenarios produced by varying four key drivers that impact grain exports favorably or unfavorably. These key drivers are world trade, crop area, crop yield and consumption patterns. The five scenarios produce a wide range of unconstrained waterway traffic demand ranging from a decrease in farm product movements from the current level of about 37 million metric tons to about 13 million metric tons in 2050 under the Least Favorable Trade Scenario to increases from current levels to about 72 million metric tons in 2050 under the most favorable trade scenario.

The guidance for restructuring the Navigation Study allowed for identification of measures that could be recommended for implementation prior to completion of the feasibility study. However, the economic evaluation of small-scale measures has not been completed. In addition, the environmental analysis describing the impacts of incremental traffic increases from these types of measures is also not complete. Both of these evaluations will be included in the feasibility study to allow for selection of a recommended plan.

The scenario-based analysis will produce "a credible benefit cost analysis". For each scenario, a plan will be identified which maximizes net contributions to National Economic Development (NED) and National Environmental Restoration (NER). A recommended integrated alternative will be selected from this array of NED and NER alternative plans and the criteria of robustness, risk, and acceptability to basin interest will be used in the development of a recommended plan. The use of scenarios is an explicit recognition and accounting for the risks involved in forecasting the future. The scenario-based analysis does not in any way preclude or impact the identification of adverse impacts and accounting for environmental mitigation and restoration measures. Each integrated alternative plan will include appropriate justified environmental mitigation measures and restoration measures. The feasibility study will include an independent technical review for the products that will be developed during this process. An independent technical review of the scenarios is ongoing. A peer review of the feasibility report is under consideration.

The Draft Interim Report Ignores the Corps' Existing Legal Obligations

Although we are encouraged that the Corps has recognized the need to reexamine and modify its operations and maintenance activities and to implement much needed restoration and mitigation, we strongly oppose the Draft Interim Report's efforts to tie such a reevaluation to any potential lock and dam expansion. The Corps is already required by law to prepare a supplemental environmental impact statement on its operations and maintenance of the 9-foot navigation channel.

A properly prepared supplemental environmental impact statement would examine a full range of alternatives to the Corps' current practices to identify less environmentally damaging methods of operating the system. This would include evaluating alternative water level management regimes, evaluating alternative channel maintenance and pool plans, and examining the removal and redesign of channel training structures and levees all to enhance aquatic and floodplain habitat, restore natural hydrologic and geomorphic processes, and increase connectivity between the main channel and backwaters and floodplains.

The Corps also is already authorized to change its operations and maintenance practices to cause less ecological harm, and to recommend and implement any needed mitigation for past, ongoing, and future impacts of the existing navigation system. As the Draft Report and other analyses recognize, less environmentally damaging operations and maintenance practices also can have significant restoration benefits. We urge the Corps to immediately prepare a comprehensive supplemental environmental impact statement, and where appropriate, to take immediate steps to improve the health of the Upper Mississippi River.

Response: The National Environmental Policy Act does not require the Corps to prepare a Supplemental Environmental Impact Statement on-going operation and maintenance of the 9' channel project. Following passage of the National Environmental Policy Act (NEPA), four Environmental Impact Statements (EIS's) were issued which addressed operation and maintenance of the Upper Mississippi River Project. Over the past twenty-five years, additional environmental documentation had been prepared as warranted, including an SEIS in 1997 for a new 50- year channel maintenance master plan for the St. Paul District and over two hundred environmental assessments for individual maintenance actions that are different from the detailed activities adequately addressed in the four existing EIS's. Additionally, in 1999 the Corps voluntarily entered into consultation with the U.S. Fish and Wildlife Service under the Endangered Species Act as described in Section 2.3.2.2.10 of the Interim Report.

Since issuance of the four EIS's referenced above, there have been no proposed major changes in the operation and maintenance of the Projects other than the activities addressed in the 1997 SEIS. Any proposed major changes in operation and maintenance of the Projects will be addressed in the Programmatic EIS (PEIS) being prepared in conjunction with the Navigation Study Feasibility Report. Likewise, any significant new circumstances or information relevant to environmental concerns of on-going operation and maintenance of the Projects will be addressed in the PEIS. The PEIS will address incremental effects of projected increases in navigation traffic for potential navigation improvements. The PEIS will also address ongoing effects of operation and maintenance of the 9-foot channel project, and evaluate modified operations and maintenance practices to benefit the environment. Additional environmental documentation will be prepared as required. The Navigation Study Feasibility Report will examine the ongoing and cumulative impacts on the UMR-IWW. This analysis will have a broader and more holistic focus than a mitigation study that would attempt to isolate those impacts or portions of impacts that are solely attributable to the project. The result could be a

recommended plan for Congressional authorization and appropriations that will be aimed at achieving an environmentally and economically sustainable system. The preliminary conclusion set forth at section 3.2.5 of the Interim Report discusses the plan for the Feasibility Report to evaluate the addition of ecosystem restoration as a project purpose of the UMR-IWW.

We are deeply concerned that the Corps intends to delay long overdue mitigation measures unless longer locks are recommended for authorization. As discussed above, the Corps does not need additional legal authority or new internal policies to examine mitigation or to take immediate steps to improve the health of the Upper Mississippi and Illinois rivers. In addition, we are concerned that by structuring mitigation as an element of the feasibility study, the Corps may propose that states share 35 percent of the cost of mitigation for the historic and ongoing impacts of the lock and dam system. We believe the federal government and the private beneficiaries of the lock and dam system should bear the cost of mitigating the historic and ongoing environmental impacts of waterway construction and operation.

Response: The Corps does not have the authority to immediately implement an ecosystem management and restoration plan for the nine-foot channel of the UMR-IWW. Existing Corps authorities have allowed for implementation of limited measures pursuant to the EMP and other national programmatic authorities and the limited environmental management activities available under a single purpose navigation project. Congressional authorization and appropriation is required for a plan and projects to more fully address ecosystem restoration of the system.

The funding issue has been addressed in some detail in Section 3.3 of the final Interim Report. As discussed in the Interim Report there are a number of options for funding and cost-sharing UMR-IWW ecosystem restoration measures. Measures to address the incremental impacts of navigation improvements and site-specific impacts may be shared as inland navigation costs and funded 50/50 between the Inland Waterways Trust Fund and the general fund of the Treasury. For the remaining measures to address the new sustainability goals and objectives, there are three primary funding options under consideration: cost sharing as ecosystem restoration; 100% Federal cost under a concept of addressing any ongoing impacts of the existing system; and cost sharing in accordance with the existing or a modified Environmental Management Program. The tentative conclusion of the Interim Report is that ecosystem restoration measures to assure the sustainability of the system will require a combination of 100% Federal and cost-shared measures. Criteria for determining the 100 percent Federal and cost-shared portions will be developed in the feasibility study.

Additional Restoration Efforts And Mitigation For The Impacts Of Any Potential System Expansion Should Be Fully Examined

Mitigation for the past and ongoing impacts of the existing navigation system should be augmented by a comprehensive restoration effort. We urge the Corps to revise the Draft Interim Report to recommend an evaluation of comprehensive ecosystem restoration

efforts, and mechanisms for funding those efforts. We further urge the Corps to subject the proposed scope of work for environmental restoration to a panel of independent experts for review and approval. We urge the Corps to use as a foundation for restoration planning the preliminary report by the Upper Mississippi River Conservation Committee entitled “A Preliminary Description of Habitat Objectives (And Estimated Costs) Needed to Achieve a Desired Level of Ecosystem Integrity on the Upper Mississippi River System.”¹

In particular, we urge the Corps to fully evaluate the removal and redesign of channel training structures to enhance aquatic and floodplain habitat, restore natural hydrologic and geomorphic processes, and increase connectivity between the main channel and backwaters and floodplains as part of a comprehensive restoration initiative (where mitigation-related efforts may not be sufficient). The Corps also should fully explore opportunities to acquire floodplain land and restore seasonal flooding by removing or repositioning levees

The Corps also should examine measures to improve fish passage, as well as other measures that would prevent and reverse the spread of exotic species. In particular, we urge the Corps to consider severing the artificial link between Lake Michigan and the Illinois River to stop the introduction of new exotic species. In recent years, three new species have invaded the Inland Waterway system through this connection, devastating native mussels and the mussel industry. The introduction of exotics will likely lead to significant and expensive mussel recovery actions.

Mitigation for any potential expansion of the locks and dams also must be fully examined. A comprehensive and detailed mitigation plan that includes mitigation monitoring must be prepared before the selection of any recommended alternative in order to determine whether the environmental impacts of such an alternative can in fact be effectively mitigated.

Response: As documented in the Interim Report the navigation feasibility study has been restructured to examine the cumulative environmental effects of navigation and the needs for ecosystem restoration as an integral part of the study with a goal of an environmentally sustainable navigation system. The preliminary report of the Upper Mississippi River Conservation Committee as well as other efforts including the Environmental Management Program Habitat Needs Assessment will be used as reference documents in formulating restoration plans. Measures to be examined will include modification of training structures, restoration of connectivity of backwater areas, restoration of natural hydrologic and geomorphic processes, improved fish passage and measures to address control of exotic species.

The Navigation Study will act as the vehicle for the establishment of baseline ecosystem sustainability goals and objectives from “bluff to bluff” within the system. In term of

¹ Upper Mississippi River Coordinating Committee. A Preliminary Description of Habitat Objectives (And Estimated Costs) Needed to Achieve a Desired Level of Ecosystem Integrity on the Upper Mississippi River System. Rock Island, IL.. June 2002.

authority for implementation, the restructured navigation study will address the authority for restoration measures that are related to the environmental sustainability of the navigation project. Ongoing Corps studies and programs including the Environmental Management Program, the Comprehensive Study, the Illinois Ecosystem Study, and the Operations and Maintenance Program will address implementation of other restoration objectives. Efforts outside Corps activities such as the U.S. Fish and Wildlife Service comprehensive refuge management plan and Department of Agriculture set-aside programs could also be involved in this process. See Section 1.6.4 of the final Interim Report for more discussion on integrated management. The feasibility study will include the development of these base conditions but each study or program will develop implementation details for their own area.

The cost for mitigation of any proposed improvements will be included in the benefit/cost analysis including monitoring costs. Mitigation cost for navigation improvements and other potential measures will be determined in the feasibility study and incorporated into the economic analysis. Mitigation plans will be coordinated with other Federal and state agencies as well as non-governmental organizations.

Release of a Final Feasibility Study Should Not Be Tied To An Arbitrary Deadline

We are hopeful that meaningful traffic forecasts and restoration planning can be completed by 2004. However, we do not believe the Corps should rely on discredited economic models and insufficient environmental data to meet an artificial deadline. Under the most optimistic scenarios, locks on the Upper Mississippi and Illinois rivers are not likely to reach capacity and would not be eligible for trust fund cost sharing until at least 2015.

Response: The schedule for the study reflects adequate time to complete all economic and environmental analysis required to support recommendations navigation improvement and ecosystem restoration. It also recognizes the need to be responsive to stakeholders and the Congress considering that this study effort has been ongoing since 1988. The eligibility for funding from the Inland Navigation Trust Fund is established by the authorization of navigation improvements for such funding.

Given the very preliminary status of the Draft Interim Report and the significant concerns raised about the report, we urge the Corps to reiterate to Congress and the public that the Draft Interim Report does not in any way support authorization to construct any component of a navigation system expansion. This is particularly important given the ongoing consideration in Congress of a Water Resources Development Act (WRDA), and efforts by industry and agricultural interests to seek such authorization in this WRDA cycle.

Response: The Interim Report clearly indicates that it is not a decision document and that the full economic and environmental evaluations necessary to support a potential recommendation for construction and navigation improvements and implementation of ecosystem restoration measures will be contained in the final feasibility report.

In light of the Corps' efforts to manipulate the original feasibility study to justify construction of longer locks, we are disappointed that the Corps continues to rely on faulty economic models and traffic forecasts. Indeed, reliance on the Tow Cost Model and grossly optimistic traffic "scenarios" has further eroded undermined the credibility of the Corps planning process. We hope the Corps will instead develop credible traffic forecasts that will be subjected to National Academy of Science review and approval, abandon the use of qualitative "scenarios," fully examine comprehensive ecosystem restoration efforts, and immediately begin the process of preparing a supplemental environmental impact statement to reevaluate operations and maintenance practices, and take immediate steps to restore lost aquatic and floodplain habitat.

Response: Comments addressed in previous responses.

We look forward to working with the Corps to develop a revised feasibility study that addresses our concerns and deserves the trust of all stakeholders.

Sincerely,

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